

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

The paragraph beginning on page 6, lines 7-20, has been amended as follows:

In general terms, the present invention provides a system and method for reducing the number of z-buffer accesses during the generation and display of a three-dimensional graphical object. This is accomplished by identifying minimum and maximum depth values (z-values) of a group of pixels making up the object. Z-comparisons are then performed on the minimum and/or maximum z-values rather than on all the z-values in the group. This allows savings in computational cycles. Memory bandwidth is also saved because no z-read requests need be submitted to the display controller 16 (FIG. 1). By making z-comparisons on the minimum and/or maximum z-values only, generalization of the z-values of the remaining pixels in the group are often possible. If such generalization cannot be made, pixel-by-pixel z-comparisons of all the pixels in the group are then performed.

IN THE CLAIMS

The claims have been amended as follows:

- 1 11. (Amended) A computer graphics display interface [**with**] for use with a
- 2 computer system having a display monitor, the interface comprising:
- 3 a memory including a z-range buffer for storing minimum and maximum depth
- 4 values of one or more layers of pixels of a display block, the z-range buffer further
- 5 storing a bitmask value, each bit in the bitmask value associating a pixel in the block to
- 6 a layer in the block; and